

**CITY OF CARLSBAD
CLASS SPECIFICATION**

JOB TITLE: GEOGRAPHIC INFORMATION SYSTEMS MANAGER

DEPARTMENT: INFORMATION TECHNOLOGY

BASIC FUNCTION:

Under general direction, to plan, organize, direct and coordinate the activities of the city's Geographic Information System (GIS) Program, to provide professional planning, administration, supervisory and technical advice on GIS matters; and to perform other related responsibilities as assigned.

DISTINGUISHING CHARACTERISTICS:

This position manages the activities of the GIS division, including the processing and delivery of product and service requests, data creation and database management activities and specialized GIS application programming. The technical maintenance aspects of the computer systems, network and database are coordinated through the Information Systems Department.

KEY RESPONSIBILITIES:

Plan, organize and direct the implementation of the city's GIS program; develop goals and objectives, recommend policies and procedures, establish priorities, schedules, and budget for the program; determine resource availability for program activities; supervise various aspects of GIS including data base design and creation, geo-processing and modeling activities, and product and service delivery.

Supervise and train GIS staff and other city department staff in the activities and effective use of GIS tools, reports and other related applications.

Coordinate with and advise principal system users to determine functional requirements of the GIS program.

Provide professional advice to other city departments to clarify geo-processing requirements and schedule updates of existing data bases, including costing and budgeting; set work priorities, ensure products are provided to requesting clients in a timely fashion and are complete and technically correct.

Ensure the establishment and ongoing maintenance of the GIS database utilizing computer hardware and software.

Represent the city in the county related to GIS coordination or joint services or interests.

Develop short and long-term plans that establish personnel and procedures needs, including training of staff, procedures to ensure data integrity of databases, and organizational structure for post-system-development staffing.

Perform other related responsibilities as assigned.

QUALIFICATIONS:

To perform a job in this classification, an individual must be able to perform the essential duties as generally described in the specification. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties in a specific job. The requirements listed below are representative of the knowledge, skill and/or ability required.

Knowledge of:

- Principles of geo-processing and mapping, including cartographic procedures.
- Computerized geographic information systems and techniques applicable to municipal mapping, such as ARC/INFO.
- Data base management theory and application; knowledge of database, information systems design, implementation and maintenance.
- Supervisory techniques and administrative practices and principles, including budget preparation and monitoring; ability to apply these principles and techniques.
- Research methods and techniques and methods of report presentation.
- City organization, policies and operating procedures that affect GIS programs.

Ability to:

- Plan, develop, manage, coordinate and promote a GIS program.
- Exercise sound judgment to interpret, apply and explain applicable municipal laws, codes, policies, and regulations.
- Select, supervise, train and evaluate assigned staff.
- Establish and maintain effective relationships with subordinates and other interdepartmental and external contacts.
- Provide professional consulting services to departments to conceptualize and analyze user needs, develop practical systems, and determine essential resources.
- Communicate effectively, orally and in writing, including translating technical information for the lay-person and educating others in effective use of systems.
- Analyze problems, identify alternative solutions, project consequences of proposed actions, and implement recommendations in support of goals.
- Exercise good judgment, flexibility, creativity, and sensitivity in response to changing situations and needs.
- Work well under pressure to meet deadlines.

EXPERIENCE AND EDUCATION:

Any combination equivalent to the experience and education that could likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Equivalent to a bachelor's degree from an accredited college or university with major course work in geography, mathematics or computer database administration or related discipline, and five years professional experience in the use of geographic information systems, with a minimum of two years supervisory experience.

PHYSICAL/MENTAL DEMANDS AND ENVIRONMENTAL SETTING:

While performing the duties of this class, an employee is regularly required to sit, to move to access office equipment and other workplace appurtenances; and to communicate, in person and by telephone. An employee is frequently required to move within and between city facilities and other locations. Abilities required by this job include reading documents and operating office equipment as necessary during the course of the work assignments.

While performing the duties, employees of this class are regularly required to use written and oral communication skills; read and interpret financial and statistical data, information and documents; analyze and solve problems; use math and apply mathematical reasoning and abstract statistical concepts; observe and interpret people and situations; learn and apply new information or skills; perform highly detailed work on multiple, concurrent tasks; work under intensive deadlines; and interact with staff, Council members and others encountered in the course of work.

The employee works under typical office conditions and the noise level is usually quiet. Employees may be required to travel to work sites or other sites for meetings; attend evening meetings; work under pressure and potentially stressful situations.

This is an at-will management classification.

DATE APPROVED: Oct. 15, 2002